

Listing of Claims:

This listing of claims replaces all prior versions and listing of claims in the application. Amendments or cancellations of any claims are done without prejudice, waiver and/or disclaimer. Assignee reserves the right to claim the subject matter of any amendment and/or cancellation in a continuing application:

1 – 3. (Canceled)

4. (Currently Amended) An apparatus ~~interface device coupled to a board on which integrated circuits are mounted for providing electrostatic discharge protection for the integrated circuits comprising:~~

an interface device including a board having:

a plurality of first contact members of a first length, each at least one of the first contact members including ~~one~~ a first end connected to the board and ~~the other~~ a second end to connect to an external device; and

~~at least two second contact members of a second length, each of the second contact members being connected to a voltage line of a voltage level, wherein one of the at least two second contact members include (i) one contact member connected to a first voltage line of a first VSS voltage level, and (ii) another contact member connected to a second voltage line of a second VDD voltage level or a VCC voltage level of a smaller than the first voltage level;~~

~~wherein the second length is greater than the first length such that when the board is coupled to the external device through the interface device in a direction, the second contact members are adapted to contact the external device earlier than prior to the first contact members contacting said the external device in response to the board being coupled to the external device through the interface device in a direction.~~

5 – 27. (Canceled)

28. (Currently Amended) A ~~detecting system for detecting integrated circuits formed on a board,~~
comprising:

~~a test device including a first board;~~

a plurality of first pins formed on ~~the~~ a first board;

a second board including a first surface and a second surface;

a plurality of first contact points formed on the first surface of the second board to receive the first pins; and

a plurality of second pins formed on the second surface of the second board, the plurality of second pins adapted to be coupled to integrated circuit contact points; and

~~a plurality of second contact points formed on each of the integrated circuits to receive the second pins,~~

wherein the plurality of first pins includes one or more first pins that are longer in length than the other first pins, or the plurality of second pins includes one or more second pins that are longer in length than the other second pins;

~~wherein electric charges accumulated on the board on which the integrated circuits are formed are discharged from one or more of the longer first pins or longer second pins.~~

29 – 30. (Canceled)

31. (Currently Amended) ~~A method of providing electrostatic discharge protection for integrated circuits formed on a board, comprising:~~

providing an interface device formed on a board, the interface device including:

a plurality of first contact members of a first length, each at least one of the first contact members including ~~one~~ a first end connected to the board and ~~the other~~ a second end to connect to an external device; and

at least two second contact members of a second length, wherein ~~connected to a voltage line of a voltage level wherein one of the~~ at least two second contact members include one connected to a first voltage line of a first VSS voltage level, and another connected to a second voltage line of a second voltage VDD voltage level or a VCC voltage level ~~smaller than the first voltage level;~~

providing the at least two second contact members with a length greater than the length of each at least one of the first contact members;

coupling the board to the external device through the interface device; and

discharging electric charges accumulated on the board via the at least two second contact members.

32 – 43. (Canceled)

44. (Currently Amended) A method of ~~providing electrostatic discharge protection in a detecting system for integrated circuits formed on a board, comprising:~~

providing a test device including a first board~~[[;]], the first board including forming a plurality of first pins on the first board;~~

providing a second board including a first surface and a second surface~~[[;]], the second board including forming a plurality of first contact points on the first surface of the second board to receive the first pins, and [[;]] forming a plurality of second pins on the second surface, wherein at least one of the first pins is longer than the other first pins, or at least one of the second pins is longer than that of the other second pins of the second board;~~

~~providing forming a plurality of second contact points on each of the a plurality of integrated circuits to receive the second pins;~~

~~providing at least one of the first pins with a length greater than that of the other first pins, or providing at least one the second pins with a length greater than that of the other second pins;~~

coupling the first pins to the first contact points and the second pins to the second contact points; and

discharging electric charges accumulated on the a third board on which the integrated circuits are formed ~~via the at least one first or second pin of greater length.~~

45 – 47. (Canceled)

48. (New) An apparatus, comprising:

a board including:

a plurality of first contact lines having ends extending toward but not reaching an edge of the board;

two second contact lines having ends extending to the edge of the board; and

a third contact line formed adjacent a periphery of the board and having first and second ends extending to the edge of the board.

49. (New) The apparatus of claim 48, wherein one second contact line is adapted to be connected to a first voltage level and the other second contact line is adapted to be connected to a second voltage level.

50. (New) The apparatus of claim 49, wherein the first voltage level comprises a VDD voltage level and the second voltage level comprises a VSS voltage level.

51. (New) The apparatus of claim 48, wherein the third contact line is adapted to be connected to a voltage level.

52. (New) The apparatus of claim 51, wherein the voltage level comprises one of a VDD voltage level, or a VSS voltage level.

53. (New) The apparatus of claim 48, wherein at least one of an end of the second contact lines, an end of the third contact line, or an end of the plurality of first contact lines are adapted to be connected to an external device.

54. (New) An apparatus, comprising:

a board including:

a plurality of first contact lines having ends disposed at a first distance from an edge of the board; and

at least one second contact line disposed between two lines of the plurality of first contact lines, the at least one second line having an end disposed at a second distance from the edge of the board,

wherein the second distance is shorter than the first distance.

55. (New) The apparatus of claim 54, wherein the end of the at least one second contact line extends to the edge of the board.

56. (New) The apparatus of claim 55, further comprising:

a third contact line disposed between two other lines of the plurality of first contact lines, the third contact line having an end disposed at a third distance from the edge of the board,

wherein the third distance is shorter than the first distance and longer than the second distance.

57. (New) The apparatus of claim 56, wherein the third contact line is adapted to be connected to one of a VSS or a VDD voltage level.

58. (New) The apparatus of claim 54, wherein at least one of an end of the at least one second contact line, or an end of the plurality of first contact lines are adapted to be connected to an external device.

59. (New) The apparatus of claim 54, wherein the at least one second contact line is adapted to be connected to one of a VSS or a VDD voltage level.

60. (New) A method, comprising:

coupling a board to a device; wherein the board comprises:

a plurality of first contact lines each having an end disposed at a first distance from an edge of the board; and

at least one second contact line disposed between two lines of the plurality of first contact lines, the at least one second line having an end disposed at a second distance from the edge of the board,

wherein the second distance is shorter than the first distance; and

discharging electric charges accumulated on the board via the at least one second contact line.

61. (New) The method of claim 60, wherein the end of the at least one second contact line extends to the edge of the board.

62. (New) The method of claim 60, wherein the board further includes:

a third contact line disposed between two other lines of the plurality of first contact lines, the third contact line having an end disposed at a third distance from the edge of the board,

wherein the third distance is shorter than the first distance and longer than the second distance.

63. (New) The method of claim 62, wherein coupling the board to a device comprises connecting the third contact line to one of a VSS or a VDD voltage level.

64. (New) The method of claim 60, wherein coupling the board to a device comprises connecting the at least one second contact line to one of a VSS or a VDD voltage level.

65. (New) An apparatus, comprising:

a board for an integrated circuit tester, the board including a surface having a plurality of contact pins of a first length and at least one contact pin of a second length longer than the first length.

66. (New) The apparatus of claim 65, wherein the board comprises one of an interface board or an interconnect board.

67. (New) The apparatus of claim 65, wherein the plurality of contact pins of a first length and the at least one contact pin of a second length comprise pogo pins.

68. (New) The apparatus of claim 65, wherein the plurality of contact pins of a first length are adapted to contact input/output terminals of an integrated circuit mounted on a second board, and wherein the at least one contact pin of a second length is adapted to discharge current from the second board.

69. (New) The apparatus of claim 65, wherein the plurality of contact pins of a first length are adapted to contact contact points of a second board, and wherein the at least one contact pin of a second length is adapted to discharge current from the second board.